



Dispensing Goes DIGITAL

New measuring technologies enhance precision and personalization techniques

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NEW YORK—Buying a pair of eyeglasses can be a complex, puzzling and even frustrating experience for many consumers. The process is often fraught with uncertainty, with consumers asking dispensers questions such as “Do these glasses look good on me?” “Can you get them to fit me more comfortably?” “Will these new lenses really help me see better?” and “Am I getting

my money’s worth?”

Fortunately, a new generation of eyewear dispensing technology is helping eyecare professionals allay their customers’ concerns by making the dispensing process more precise, personal and ultimately, more enjoyable.

The new technologies—offered by companies such as Carl Zeiss Vision, Essilor, Optikam, ABS and Shamir Insight—range from cutting-edge dispensing systems that take digital photographs and measurements to simple hand tools. What they have in common is the

ability to precisely capture patient measurements, including how the frame fits the patient and the position in which it is worn. Combining this biometric data with the patient’s prescription and a digital lens design enables the optical laboratory to produce one-of-a-kind lenses that optimizes the performance of the lens and gives the wearer a totally personalized viewing experience.

Along with the “wow” reaction these lenses typically elicit from wearers, patients are often favorably impressed with the high tech

look and feel of the dispensing system itself and well as with useful features such as taking digital photos of consumers trying on their new eyewear and then emailing them the photos, or demonstrating premium lens options.

Interviews with several ECPs reveal that the new technologies are boosting sales of premium lenses, reducing redos and creating a unique patient experience that can’t be duplicated by an online, virtual dispensary—at least not yet. One proponent is Barry Santini, an

Continued on page 22

ECPs Capitalize on Technologies' 'Wow' Factor

Continued from page 21

optician and writer who owns Long Island Opticians in Seaford, N.Y. He believes that taking eyewear measurements with digital photographs offers distinct advantages over older technologies such as pupillometers.

"Precision is enhanced," said Santini. "Most digital centration devices deliver a precision of a tenth of a millimeter, which is more precise by a factor of five than a common digital-readout pupillometer. Accuracy is also enhanced."

Another benefit is improved repeatability, according to Santini. As he pointed out, "In many busy offices, there are multiple employees of varying skill levels. Digital picture measurements reduce the variations between operators as well as between successive measurements by a single operator."

In addition, taking digital photos and measurements allows the dispenser to properly consider how the frame fit the patient, Santini said.

"The advent of wrap around eyewear, as well as position of wear enhanced single vision and progressive lenses, require that ECPs obtain good values not only for PD and pupil height, but also for vertex distance, pantoscopic tilt and panoramic (aka face-form) angle," he noted. "Taking these position-of-wear measurements can be daunting to dispensary personal, primarily due to their unfamiliarity. Obtaining these via digital pictures is easy and makes both the dispen-



Barry Santini of Long Island Opticians displays his ABS Smart Centration Diamond system.

tool for helping you view new frames styles, as well as helping us take the best and most accurate measurements.' Our customers are always impressed, and we'll quickly demonstrate how easy and intuitive it is to operate. Children watch and lis-

sary and lab better partners in the visual performance delivered to the patient."

Santini uses the ABS Smart Mirror's Smart Centration Diamond system at Long Island Opticians. He said the system's eye catching design attracts the attention of customers.

"In our office, we have placed our Smart Mirror in a prominent

position, and then waste no time showing Mom and Dad their natural facility in using the Smart Mirror. I



Dispensing optician Ronald Riesz instructs a patient to look at the camera in the Optikam Tech OptiCentration kiosk in his Arlington, Mass. shop.

a little, even by a few millimeters, I'd have to take the measurement again," he said.

"Now, every time I take measurements, I have no redos. The height and the PD are precise, and there's less distortion on the side. It's scary."

Even though it takes a few minutes longer to measure a patient with OptiCentration, Riesz

often comment that we're grooming future opticians."

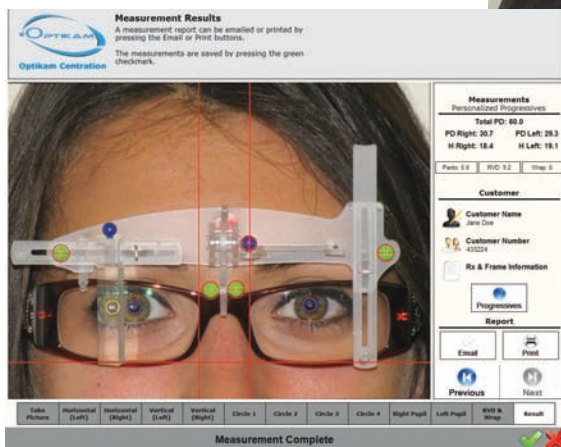
Ronald Riesz, whose eponymously named optical shop is located in the Boston suburb of Arlington, Massachusetts, has also been won over by the new fitting technologies. For

the past year, Riesz has been using the OptiCentration kiosk made by Optikam, a Montreal-based company. He believes it is having a positive effect on his customers as well as on his business.

"The measurements it takes are unbelievably accurate," said Riesz, who, like most opticians, was accustomed to measuring PDs with either a pupillometer or with the time honored method of shining a penlight in the patient's eye, locating the center of their pupil and dotting the lens with a felt-tipped marker.

"Before I started using OptiCentration, I didn't have many do-overs," said Riesz. "But if I was off

Patient being measured by Optikam's OptiCentration kiosk.



position, directly between our two dispensing desks. In this placement, every client asks us 'What is that thing?' We reply, 'It is our new

uses it on all types of customers, including both progressive and single vision lens wearers. He said it is particularly useful for measuring patients with strong prescriptions, and pointed out that the stronger the prescription, the more accurate the optical

Continued on page 24

New Dispensing Technologies Boost Sales and Reduce Redos

Continued from page 22
center has to be.

“If the optical center is off, your eyes get tired and you can’t read for a long time. If you have a strong reading prescription, you want everything in center of the eye.”

Although he could occasionally still use a pupillometer for measuring PD, Riesz prefers OptiConcentration for its versatility, especially its ability to demonstrate premium lenses.

“You’ve can demonstrate AR lenses and show the patient how things would look like at night, in the rain or driving,” he pointed out. “If you can sell a pair of Essilor Avancé [AR lenses] you’ve got a little profit. You can also demonstrate Transitions lenses indoors or outdoors, or show them the thinness of a high-index.”

Another plus using the Optikam system is that it impresses patients, especially when they see other patients being measured, Riesz said. “Patients who see me use it say ‘Why don’t you use that machine on me?’”

Riesz said that although he was initially nervous about the system’s \$8,000 price tag, he believes the investment is well worthwhile. “A four-year lease is only about \$240 a month,” he noted, which is less than the price he charges for a pair of premium progressives.

Optometrist Bryan Vanesian has also recently embraced new dispensing technology. About six months ago, he acquired a Carl Zeiss Vision iTerminal for his office in rural Phelan, Calif., which is about a two-hour drive west of Los Angeles. Dr. Vanesian said he got



An optician at the Phelan, Calif. office of Bryan Vanesian, OD (r) uses the Zeiss iTerminal to measure a patient for Zeiss lenses.

the iTerminal for two main reasons. “I like high-tech stuff, and I wanted to lower the number of doctor redos because the progressives weren’t measured correctly by my staff.”

According to Dr. Vanesian, the iTerminal hasn’t completely eliminated redos because some patients still raise or lower their head when their photo is taken, which can throw off the measurements. But he said the system has lowered redo rates, primarily because of its precision. “It measures up to a tenth of a millimeter, and up to a tenth of a degree of rotation,” he noted.

“One of the things about having iTerminal is that it gives us access to true custom made lenses like Zeiss Individual, which you can’t even prescribe unless you have an iTerminal,” Dr. Vanesian said. When describing the benefits of the Zeiss Individual, he makes sure to tell patients that “These aren’t your regular progressives that you’d get from a mass merchant. We can custom make your lens, with your initials engraved into it.”

Dr. Vanesian also likes the iTerminal because it “goes with the flow” of his office. “We’re paper-

less, we have the Zeiss GDx machine for glaucoma diagnosis, and we have the Optos retinal scan, the new 3D model,” he said. “Now we can take our high tech approach into

the optical, rather than just using rulers and felt markers for measuring and marking lenses. Visually, the unit is very appealing. It’s two white blocks. It’s almost like Apple made it.”

Dr. Vanesian said his staff uses the iTerminal mostly with higher prescriptions in order to give them the widest field view and lowest distortion. Like Ronald Riesz, he uses it not just for progressives, but for single vision lenses as well such as the single vision version of the Zeiss Individual which features free form front and back surfaces.

“iTerminal has helped us sell more premium eyewear such as the Zeiss Individual progressive, which we charge \$610 for, or the Zeiss Individual single vision, which sells for \$450,” said Dr. Vanesian. “That brings the total cost of the eyewear close to \$1,000. It amazes me that my staff doesn’t

have too much trouble selling them, because this is a blue collar town.”

Dr. Vanesian cited another benefit of the iTerminal. “We have patients who have worn PALs and could not adapt to progressives before but are now able to wear these lenses,” he said. “So there’s got to be something to it. There’s less distortion and wider intermediate zones. We have a very low redo rate. We’ve only had two non-adapts in six months.”

As with many types of high tech equipment, proper training is required to operate the iTerminal and derive its full benefits. “When we first got the machine, we were having lot of problems with redos,” said Dr. Vanesian. “It turned out they didn’t teach us how to use the machine. Once we were retrained, everything was fine. There is a learning curve.”

He praised Zeiss for its respon-



siveness to his start-up problems. “The rep would come and bring lunch, go over all of the problems and questions we had, then retrain the staff and train new employees.

Continued on page 26

ECPs Agree Investment in New Systems Pays Dividends

Continued from page 24

It's important to have staff that feels comfortable selling \$600 lenses. You don't want a machine like this sitting in the corner."

Dr. Vanesian said the iTerminal is quickly proving its value. "In order to cover the cost of the machine, which is about \$7,500, Zeiss wants us to sell about 180 pairs of lenses in 18 months, which is about 10 pairs a month. We've easily met that number. It's a sweet deal."

As dispensing systems evolve, developers are adding new capabilities to them. The latest system to hit the market is Visioffice, which Essilor has just released in the U.S. In addition to measuring wrap angle, pantoscopic tilt, vertex distance, monocular PD, fitting height and A, B, DBL values, Visioffice measures optical eye rotation center for each eye and natural head posture for proprietary "eyecode" lenses, which are available on select Varilux and

Dispensing optician Jim Voss of the John Boys Smith Vision Center uses a tool from the Shamir Panoramter kit to measure a patient's vertex distance.



say, 'That's pretty close to 10 degrees.' Now the precision is increased exponentially. The tools are simple and elegant. You don't need all the electronics to use them," he said.

According to Voss, using the Panoramter has significantly reduced the number of redos at the vision center. "We've had a much higher rate of patient satisfaction, too," he said. "When people put

Essilor single vision lenses. Visioffice also measures the stability ratio and head/eye coefficient that are needed to dispense Varilux Ipseo IV lenses.

Optician Jean Sabre, who, with her husband, Mark Sabre, OD, co-owns Uptown Vision Clinic in Minneapolis, has been using a Visioffice prototype for over a year, and credits it for helping to sell more premium lenses. "Visioffice has had a huge impact on our practice," she said. "We primarily use it for progressives, especially the new digital lenses such as Varilux Ipseo. It gives us a higher level of accuracy."

Sabre added that Visioffice also helps patients select frames. "We're able to image four different frames for a patient to view, so they can see the frames side by side," she said. "The system also has email capa-

bilities, in case the patient wants someone to get input on their choices. We've even had patients put photos on Facebook so people can vote on which frame they like best. We can also print out a photo like in a photo booth so the patient can take it with them."

Although digital dispensing has an undeniable "wow" factor with patients, some ECPs said a low tech approach can also be effective. Jim Voss, a dispensing optician at the John Boys Smith Vision Center in Ellensburg, Wash., relies on the Shamir Panoramter kit for measuring patients. The kit contains two simple, plastic hand-held tools. One tool measures panoramic angle and pantoscopic tilt; the other measures vertex distance.

"These tools give us the ability to accurately measure pantoscopic tilt and frame wrap," detailed Voss. "In the old days, you'd have the patient turn their head and you'd



Shamir Panoramter kit.

the lenses on they are amazed. We've had very few problems with Shamir Autograph lenses, very few rejections.

"It's really increased my ability to do a better job," Voss concluded. "I can give the lab everything it needs, including an accurate prescription and frame parameters."

Whether dispensers take a high tech or low tech approach to fitting eyewear doesn't seem to matter, as long as it reduces the number of redos. As Jean Sabre of the Uptown Vision Clinic remarked, "The more accurate your measurements are, the more success you'll have in fitting lenses. We have less redos and patients are happier. And if they're happy, we're happy." ■■

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Essilor's new Visioffice tower.



Jean Sabre of the Uptown Vision Clinic in Minneapolis with the Essilor Visioffice system.